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Women in Productive Industry

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TO assert that there is no sex in industry is but to restate a truism.

To claim, today, that human engineering has eclipsed mechanical engineering as the potent factor in competitive production is but to echo the propaganda born of the experience of international reconstruction.

But to suggest that the majority of agitation on behalf of an economic "double standard" for men and women in the workroom is as open to question as a moral "double standard" in society is to invite criticism from many sources, including the public as well as the employer, and those upon his pay-roll.

Nevertheless, those of us who are honest in weighing the year-long factors of success in the speeded war industries of a dozen countries know that their production charts definitely wiped out sex distinction not only in the munition plants, but in the standard industries of peace as well.

Nothing can be further from the truth than the assumption that the war was won by a deliberate breaking down of those physical safeguards which forbid the sweating of the operative as well as of the machine. Although, under the stress of unpreparedness, thousands of tragedies were doubtless bred in the workroom, they were as incidental as the toll of admittedly needless suffering in the trenches and on the firing line.

As a matter of fact the industrial lesson of the war has been scientific proof of the balance which has always existed between physical and produc-

tive efficiency, and of the inevitable relation existing between excess costs in the overhead, the wastage of bad time-keeping and the unregulated labor turnover.

To inject sex distinctions into contemporary labor problems is to befog issues which concern not individuals but the nation. We are rocked by the wake of the European industrial revolution, and we are learning month by month that the acid test of industrial supremacy is made in the laboratories of peace rather than in those of war. Bound by contracts stripped of all verbiage of patriotism, cramped by the loss of the leeway of excess profits, floundering from cost-plus quicksands back to the bedrock of earnings netted or lost, the post-armistice captains of industry have need for even clearer vision than that which launched our fabricated keels and bridged the Atlantic with munitions.

The flood-tide of rising wages and the steadily ebbing water-line of working hours have left the sands of the labor world strewn with the flotsam and jetsam of past employment traditions, and the wreckage of even our basic manufactories. As a nation consuming more than it is willing to produce, and drifting on the rocks of spending more than it is ready to earn, America is today concerned with no more vital problem than that of the relation of the worker to his work.

The line that depicts per capita production on the factory chart, however, strikes its average in relation to pay-roll and hours irrespective of

questions of sex or of age. The position of women in industry today differs not one jot from that of men, in that in the hands of both rests the solution of the modern economic riddle of how the streams of adequate wages and bettered industrial conditions shall be fed from a dwindling spring of national productive capacity.

DID THE WAR REVOLUTIONIZE INDUSTRIAL CONDITIONS?

While the social changes of the brief war-span must be measured by generations rather than years, we shall do well to discard the fallacy that the world conflict has revolutionized the relation of employer and employee. The search light of emergency may create a new perspective, and transform the doubtful into the obvious; but a reversal of the familiar relations of light and shade in the scene about us can alter nothing, in reality, except the viewpoint of the spectator.

Yet no phrase of the war was more readily accepted by the public than that declaring that our industries were confronted by wholly new conditions. Reduced to its last analysis, the lime-light of publicity and the headlines of the press featured the fact that women were earning a living wage on the lathe of the machine-shop, in the laboratory of the chemical plant, and in the cab of the overhead crane. The relation existing between productive efficiency and the standard layout of the machine-shop and the questions of ventilation, lighting and safeguarding were no different than before the war. The fumes of the chemical plant were neither more nor less poisonous than in the days of the "wop" and the "hunkie" from Ellis Island. The hazards of the crane were the same that for years had been written in red in the records of the Workman's Compensation Bureau.

What then was new? The work? The danger? Or was it rather the reaction of popular sentiment in favor of the protection of a new type of employee from the physical or social toll of the employment? Did industry owe a suddenly discovered duty of protection to the woman which it had earlier been free to deny the man? After all, was the woman in industry other than a new test of working standards upon whose economic soundness depended not merely the profit of individual concerns, but the very survival of the nation?

Whether conditions were new or not, the vocabulary of the practical works-manager became suddenly enlarged by additions from that of the social economist and the reformer. The worker became a twenty-four hour problem as soon as the lights of the munition plant blazed in an endless chain from sundown to dawn. Blue books on the health of women war-workers found their place upon the desks of those to whom the span of the employee's day had heretofore been bounded by the blasts of the factory whistle. While the fate of Europe wavered in the balance men, who prided themselves that the keenness of their business judgment was undulled by sentiment, talked of the problems of housing, transportation, fatigue, malnutrition, monotony, training schools, shop hygiene and of the comprehensive activities of the welfare worker.

Yet nothing had been radically changed except the pace of production. Neither the questions of wages and hours nor the sex of the producer were determining factors. In America, as overseas, the woman in overalls had added no new links to the chain that had hitherto been trusted to swing the overhead load of industry. But the hazard of its possible weakness

had suddenly become a matter of international concern; and under the strain of the speeded shift its strength was tested, not by its apparent massiveness, but by its flaws.

ECONOMIC VALUE OF GOOD WORKING CONDITIONS

The fact that only in a negative sense was the war won by the woman in industry in no way detracts from the value of her service or the interest in her achievement. That her welfare became the concern not only of the employer, but also of a public which had long accepted without more than sporadic protest the tragedies of the sacrifice of women's vitality to the monotony of the loom, the incredible labors of the steam laundry, and the ruthlessness of the parasitic trades, is now of passing interest.

It was rather the awakening of industry itself to the costliness of the unregulated labor turnover, and of exacting a physical toll from the worker, whatever the nature of the work or the sex involved, which turned the scales of war, and must be counted upon to ensure the winning of the greater industrial victories of peace.

Although woman's hand was on the lever when the dial of our eastern munition district registered full speed, few will claim for women an inherent industrial ability superior to that of their male competitors. Patience or delicacy of touch aside, those who have studied the astonishing output of the woman-operated war industry which was equipped with standardized workrooms, vestibule training schools, dressing-rooms, wash rooms, lunch rooms, rest rooms, first-aid hospitals and an auxiliary housing and transportation welfare service, are more inclined to attribute the record of the production chart to the soundness of the system than to any difference of sex.

The fact, however, that our social conscience, on behalf of women, convinced our business judgment that industry could be made more productive in proportion to its greater safety and bettered working conditions, is one of the most constructive achievements of the war.

PRODUCTION A VITAL FACTOR IN RECONSTRUCTION

On the test of sustained productivity, therefore, rests not only the retention of women in the peace industries, but also the general adoption of bettered working conditions which the emergency of war forced upon even the reactionary contractor as the price of his success.

It would be folly to suggest that the business value of good working conditions was a discovery of the industrial engineers of the munitions departments of the Allies. For years employers of labor on both sides of the Atlantic had been following progressive policies in their workrooms, although first led thereto rather by the dictates of humanity than by a keen vision of their economic value in relation to production.

However, there is no question as to the revelations of the war-test concerning the interrelated factors which assure a maximum standard of output based upon equipment, or regarding the fallacy of reliance upon the individual effort of the operative as the gauge of the necessary balance between the overhead and the production cost.

While hours were long and wages and materials were low, the almost incredible total of the needless waste of the old industrial system was carried as an inevitable by-product of the factory, and deficits were commonly offset by a further cut in wages or an increase in selling price. But the science of business management, which can balance

the living wage and rational workday against the elimination of every penny-leak along the routing of material from the freight platform to the shipping office, has not only survived the war which it helped to win, but must also be the guide of our employment policies of the future.

What, after all, is the test of production? The overspeeding of a single shift, in order that sufficient interest may be earned to allow industrial equipment to lie idle two-thirds of every working day; the sum of individual endurance, and of the applied skill and craft-training of men or women who are in no sense sharers in the responsibility of the system which assures them their pay envelope only so long as their labor insures to the employer his working margin of profit? Is it the fortunate accident of chance personality of foreman or manager, whose technical ability is combined with an instinct for the selection and handling of the human tool, and so keeps more than the machinery of his department running sweetly? Or is it rather the hourly evidence of a scientific coördination of every mechanical and physical conservation factor known to modern industry, combined with the stimulus of personal incentive, and with the common sense doctrines of practical human engineering?

Since the secret of production lies in the manager's office, rather than in the workroom, it might be argued that the character or sex of the employee is a matter of small concern. But although the day has passed in which the faithfulness of the old-type employee can be counted upon to offset hap-hazard methods or lack of organizing and administrative ability of the executive staff, successful business competition must always be based upon the spirit of coöperation within the industrial organism.

While the new democracy assures the rights of the individual, the maintenance of such rights is based upon mutual acceptance of social and industrial responsibility. The chaos of wrecked provinces and devastated communities can be a no more logical consequence of unrestrained militarism than the economic ruin foreshadowed by the threat of unrestrained and individualistic industrial warfare.

The working ability of women, therefore, may prove a less determining factor in assuring their retention upon the pay roll than their conservatism, their conscientiousness, their normal dislike of conflict and their adaptability to their working environment.

To proclaim them the equals of men as productive units throughout the range of industry is as inaccurate as it is nonessential in directing the self-sifting process still in course of operation in the employment offices of the country. No one, however, can question the superiority of women in an infinity of processes calling for delicacy of touch, quickness of perception, painstaking accuracy of adjustment, or taxing the subconscious physical reactions associated with the monotony of automatic processes.

Under the stimulus of better wages, improved living conditions, and more liberal diet, the sustained physical endurance of women in the metal trades during the war disproved the prediction that production at the lathe must be achieved at the expense of woman's vitality. But in the rougher basic industries, where muscle is an essential, and the hazard of undue pelvic strain is prevalent, American sentiment and the social duty of safeguarding the function of maternity fortunately forbids a conclusive test of the efficiency of the woman employee.

The industrial engineer who success-

fully swung his shifts of women war workers, however, will be loath to admit the validity of the plea for special working privileges based not on economic argument, but on the sentiment which assumes as a corollary that there is justification for the physical exploitation of the man in a similar occupation. The salvation of industry is now based on the elimination of all physical handicaps to the well-being of every employee, as a prerequisite to a productive efficiency which must not only be sustained but accelerated if we are to avoid the defeat of peace.

It is no longer a question of whether the hand on the belt-shifter be that of a woman or of a man. It is a question of service which shall justify the retention of a wage scale and workday, which has been won by the patience of generations, and by self-sacrifice in the trench as well as at the machine.

As long as the woman in industry demonstrates her ability to balance her earnings by her sustained output, not only is her retention on the payroll assured, but she will find also a steadily broadening range of opportunity.